

Claims

What is claimed is:

1. A portable computing device, comprising:
a component that receives an electro-magnetic flux generated from an external source; and
a charging component that generates a charging current from the flux, and charges a rechargeable power supply.
2. The portable computing device of claim 1 further comprising a bar code scanner.
3. The portable computing device of claim 1 further comprising an artificial intelligence (AI) component that infers and/or determines when the power supply should be recharged.
4. The portable computing device of claim 3 further comprising a notification component that notifies a user of the device that the device should be exposed to the external flux source.
5. The portable computing device of claim 1 further comprising:
a controller that monitors a state of charge of the rechargeable power source.
6. The portable computing device of claim 1, the rechargeable power source being at least one of a fuel cell, a capacitor, a super capacitor, and a rechargeable battery cell.
7. The portable computing device of claim 6, the controller determines a charging time for the portable unit and allocates a charge time thereto.
8. The portable computing device of claim 1, further comprising:
a notification component that alerts a user of power status of the rechargeable power supply.

9. A method of charging a portable unit comprising:
 - providing at least one primary induction assembly with a primary winding configured to create a magnetic flux;
 - providing a second pick up induction assembly coupled to a rechargeable power supply of a portable unit; the magnetic flux extendable in to the second pick up induction assembly; and
 - opportunistically recharging the power supply *via* a current created in the second induction assembly from the magnetic flux.
10. The method of claim 9, further comprising:
 - opportunistically recharging the power supply without deactivating the portable unit.
11. The method of claim 9, further comprising:
 - immediately recharging the power supply, when the magnetic flux extends in to the second pick up assembly.
12. The method of claim 9, further comprising:
 - providing a controller to control at least one of the primary induction and the secondary induction assembly.
13. The method of claim 12, further comprising:
 - triggering an event to energize the primary winding.
14. The method of claim 13, the triggering further comprising:
 - varying a light feature.
15. The method of claim 13, the triggering further comprising:
 - moving a user's body part in a predetermined manner.

16. The method of claim 9, further comprising:
charging the rechargeable power supply *via* a scavenging method employing at least one of a user's body heat, user's foot pressure, and solar energy.
17. The method of claim 9, further comprising:
aligning the second induction assembly in close spatial proximity to the first induction assembly.
18. The method of claim 9 further comprising:
carrying the first induction assembly by a member of a group; and
approaching the member when an opportunistic recharge is required for portable units of other members.
19. A charging system for a portable unit comprising:
a primary induction assembly with a primary coil coupled to a primary power source; and
a secondary induction assembly with a secondary coil coupled to a rechargeable power source of the portable unit; the magnetic flux of the first primary induction assembly extendable to the secondary induction assembly so as to provide the rechargeable power source a charging current that is inductively created *via* the magnetic flux during an opportunistic charging of the portable unit.
20. The charging system of claim 19 further comprising:
a controller in wireless communication with the portable unit for monitoring a state of charge of the rechargeable power source.
21. The charging system of claim 20, the controller comprising a sensor.
22. The charging system of claim 21, the sensor is at least one of a motion and a light sensor.

23. The charger system of claim 19, the rechargeable power source is at least one of a fuel cell, a capacitor, a super capacitor, and a rechargeable battery cell.
24. The charger system of claim 20, the controller determines a charging time for the portable unit and allocates a charge time thereto.
25. The charger system of claim 19, at least one of the portable unit and the charger system is wearable around a user's body.
26. The charger system of claim 20, further comprising:
a notifying system that alerts a user of a power status of the rechargeable power supply.
27. The charger system of claim 20, the primary induction assembly is part of a flat pad.
28. The charger system of claim 25, further comprising:
a thermo-coupler connected to a user's body for additionally recharging at least one of the primary power source and the rechargeable power source.
29. A charger system for charging a portable unit comprising:
means for creating a magnetic flux; and
means for receiving a magnetic flux, the receiving means operatively connected to a rechargeable power source of the portable unit so as to create an electric current during an opportunistic charge of the portable unit.